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| 09/824,035 | 04/03/2001 | Nobuyuki Tanaka | WN-2316 | 8744 |

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| EXAMINER | |
|---|---|
| VAN HANDEL, MICHAEL P | |
| ART UNIT | PAPER NUMBER |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/824,035 | TANAKA, NOBUYUKI | |
| | Examiner | Art Unit | |
| | MICHAEL VAN HANDEL | 2623 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *5/29/2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-10,12 and 14-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,12 and 14-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

1. This action is responsive to an Amendment filed 5/29/2008. Claims **1-10**, **12**, **14-23** are pending. Claims **1**, **7**, **8**, **12**, **14-17**, **22** are amended. Claims **11**, **13**, **24**, **25** are canceled. The examiner hereby withdraws the rejection of claims **7**, **8** under 35 USC 112, first paragraph, in light of the amendment.

### *Response to Arguments*

1. Applicant's arguments regarding claims **1**, **12**, **14-17**, and **22**, filed 5/29/2008, have been considered, but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 101*

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims **16**, **17** are rejected under 35 U.S.C. 101, because the claimed invention is directed to non-statutory subject matter.

Referring to claim **16**, the examiner notes that computer programs constitute functional descriptive material; however, functional descriptive material is nonstatutory when claimed as descriptive material *per se*. See **MPEP 2106.01** for guidance. The examiner recommends that the preamble be changed to something like "a computer-readable medium encoded with a program representing a sequence of instructions which, when executed by a processor, cause the

processor to perform a method of reproducing a digital content, the method comprising:".

Referring to claim **17**, the examiner notes that computer programs constitute functional descriptive material; however, functional descriptive material is nonstatutory when claimed as descriptive material *per se*. See **MPEP 2106.01** for guidance. The examiner recommends that the preamble be changed to something like "a computer-readable recording medium encoded with computer readable instructions which, when executed by a processor, cause a computer to perform a method of reproducing a digital content, the method comprising:".

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims **1-10**, **12**, **14-23** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter, which applicant regards as the invention.

Referring to claims **1**, **12**, **14-17**, and **22**, the examiner notes that it is unclear what Applicant means in the claims. In each of the claims, Applicant recites that, in the backup reproducing device, "a video decoder … decodes the digital content supplied from a mass memory unit, *while* the reproducing device periodically sends a first predetermined signal" (italicized for emphasis), or similar language, but then goes on to recite that "the backup reproducing device starts the decoding when the backup reproducing device receives said first predetermined signal." The examiner notes that "said first predetermined signal" has antecedent basis in the first of the cited recitations; however, in that recitation the video decoder is already

decoding the digital content while the reproducing device sends the predetermined signal. That is, it appears in this cited passage that the decoding is occurring before the predetermined signal is received, as it occurs *while* the reproducing device is sending the signal. As such, it is unclear what is meant by starting the decoding when the first predetermined signal is received by the backup device, since it appears that the backup device was already decoding while the reproducing device was sending the signal. As such, the examiner interprets "starting the decoding" as continuing the already started decoding process in the Office Action below.

Claims **2-10**, **18-21**, and **23** are rejected as being dependent on the above mentioned claims.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims **1-7**, **9**, **10**, **12**, **14-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Morley et al. in view of Takamori and further in view of Brown et al.

Referring to claims **1**, **2**, **5**, **9**, **12**, **14-18**, **22**, and **23**, Morley et al. (WO 99/59335) discloses a digital content reproducing/projecting system/method/recording medium/program/program product comprising:

- a movie company terminal 108 which stores and manages a digital content of movies (p. 18, l. 9-32; p. 19, l. 1-23; & Figs. 2A, 3);

- a content delivery terminal in communication with the movie company terminal via a network (p. 25, l. 23-30 & Figs. 2A, 5); and
- a projecting system (theater system) which is connected to the content delivery terminal via the network, receives the digital content from the content delivery terminal via the network, and reproduces the digital content to show a movie (p. 11, l. 26-32; p. 12, l. 1-6; p. 31, l. 13-16; p. 44, l. 12-19; & Figs. 2B, 7), wherein the projecting system comprises a reproducing device 130A (p. 16, l. 31-32; p. 17, l. 1-4; & Fig. 2B) having an audio decoder and a video decoder that decodes the digital content supplied from a mass memory unit (p. 16, l. 17-21, 25-32; p. 17, l. 1-4; & Figs. 2B, 11).

Morley et al. further discloses using redundancy of components to provide backups in the distribution system. Some of the redundant components can be operated in a "standby" or "warm start" mode as desired for rapid selection and switch over when needed (p. 12, l. 7-9; p. 28, l. 15-19; p. 29, l. 21-32; p. 30, l. 1-17; p. 36, l. 12-24; & p. 38, l. 14-19). Morley et al. does not specifically disclose a backup reproducing device having an audio decoder and a video decoder that decodes the digital content supplied from a mass memory unit while the reproducing device periodically sends a first predetermined signal indicating progress of reproducing of the reproducing device, directly to the video decoder of the backup reproducing device, and starts processing the decoded digital content in synchronization with the first predetermined signal and supplying the signals to reproduce the movie in addition to the decoding process when the reproducing device stops sending the first predetermined signal, wherein the backup reproducing device starts the decoding when the backup reproducing device

receives said first predetermined signal. Takamori discloses a video switcher apparatus with a main unit for supplying video and audio signals and a back-up reserve unit including video and audio components identical to those in the main unit (col. 2, l. 16-20). Self-diagnostic portions 9 supervise the operating status of the main and reserve blocks. If any of the self-diagnostic portions detects a failure, the output of the applicable self-diagnostic portion causes the switching portion 5 to switch from the failed block to the other block (col. 2, l. 26-49). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the decoder module of Morley et al. to include a back-up unit with identical video and audio components and a video switcher for switching between the decoder and the back-up system upon failure of the main unit, such as that taught by Takamori in order to avoid severe troubles, such as stoppage of signal transmission (Takamori col. 1, l. 11-16; col. 3, l. 66-68; & col. 4, l. 1-2), thereby assuring reliable operation in highly time sensitive and demanding presentation markets (Morley et al. p. 30, l. 12-15).

The combination of Morley et al. and Takamori does not specifically teach that the reproducing device periodically sends a first predetermined signal indicating progress of reproducing of the reproducing device, directly to the video decoder of the backup reproducing device, or that the backup device starts processing the decoded digital content in synchronization with the first predetermined signal when the reproducing device stops sending the first predetermined signal, wherein the backup reproducing device starts the decoding when the backup reproducing device receives said first predetermined signal. Brown et al. discloses a fault recovery method where a message called a heartbeat is broadcast among the processors once during every major processing cycle (see Abstract). Processors can act in a duplex standby

mode, with one of the processors designated as the active processor and the other processor ready to become the active processor whenever needed. Both processors receive data from the same source (col. 5, l. 60-65 & Fig. 4) and perform the same functions at the same time (col. 9, l. 15-20). When the active processor fails, it terminates transmission of the heartbeat messages. The standby processor detects this condition and assumes the role of active processor (col. 9, l. 20-26). It would have been obvious to modify the primary video decoder processor in the combination of Morley et al. and Takamori to transmit a heartbeat signal directly to the second video decoder processor, so that the secondary video decoder processor becomes primary when it fails to detect a heartbeat signal, such as that taught by Brown et al. in order to allow spare processors to autonomously take over the functions of failed processors without being required to consult or obtain the approval of an executive processor (Abstract of Brown et al.)

Further referring to claims **14-17**, Morley et al. discloses:

- at the movie company terminal:
    - requesting registration of a digital content of a movie with the content delivery company terminal and sending the digital content of the movie in response to a request to register from the content delivery company terminal (p. 29, l. 21-32; p. 30, l. 1-12; & Fig. 8);
- at the content delivery company terminal:
    - sending a request to register the digital content of the movie to the movie company terminal in response to a request to register from the movie company terminal (p. 29, l. 21-32; p. 30, l. 1-12; & Fig. 8);

- receiving the digital content of the movie from the movie company terminal (p. 13, l. 31-32 & p. 14, l. 1); and
- sending the digital content of the movie to a movie theater terminal that includes the reproducing device and the backup reproducing device (p. 14, l. 1-4).

Referring to claim **3**, the combination of Morley et al., Takamori, and Brown et al. teaches the digital content reproducing system of claim 2, wherein the projecting system further comprises:

- a projecting device which receives the video signals from the audio-visual switching device and projects them on a screen (Morley et al. Fig. 11); and
- an audio processor which receives the audio signals from the audio-visual switching device and outputs them to a loudspeaker (Morley et al. Fig. 11).

Referring to claims **4**, **7**, and **21**, the combination of Morley et al., Takamori, and Brown et al. teaches the digital content reproducing system of claims 1 and 3, wherein the reproducing device and the backup reproducing device comprise the same elements (as taught by Takamori above) and each of the devices comprises:

- an encrypting module 300 which is connected to the mass memory unit and encrypts the digital content received from the mass memory unit (Morley et al. p. 42, lines 18-23 & Fig. 11);
- an audio-visual separating module 292 which receives the digital content from the encrypting module and separates them into the video signals and the audio signals (Morley et al. Fig. 11);

- the video decoder 296 which receives the video signals from the audio-visual separating module and decodes them (Morley et al. Fig. 11);
- a video signal output device 296 which receives the decoded video signals from the video decoder and outputs them to the audio-visual input switching device (Morley et al. Fig. 11);
- a second encrypting module which is connected to the mass memory unit and encrypts the audio data received from the mass memory unit (Morley et al. p. 42, lines 18-23 & Fig. 11);
- the audio decoder 298 which receives the audio signals from the audio-visual separating module and decodes them (Morley et al. Fig. 11); and
- an audio signal output device 298 which receives the decoded audio signals from the audio decoder and outputs them to the audio-visual input switching device (Morley et al. Fig. 11).

Further referring to claim **7**, Morley et al. discloses that the digital content is individually supplied in the form of video data and audio data (Morley et al. p. 14, l. 5-19).

Referring to claim **8**, the combination of Morley et al., Takamori, and Brown et al. teaches the digital content reproducing system of claim 7, wherein the video signal output device 132A supplies the decoded video signals to a projecting device (Morley et al. Fig. 11), and wherein the audio signal output device 134A supplies the decoded audio signals to an audio processor (Morley et al. Fig. 11).

3. Claims **6**, **10**, **19**, **20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Morley et al. in view of Takamori, further in view of Brown et al., and still further in view of Duso et al. (of record).

Referring to claims **6**, **10**, **19**, and **20**, the combination of Morley et al., Takamori, and Brown et al. teaches the digital content reproducing system of claims 5, 9, and 18. The combination of Morley et al., Takamori, and Brown et al. does not specifically disclose that the backup reproducing device sends a second predetermined signal, to the reproducing device, to instruct the reproducing device to stop, after the backup reproducing device starts the sending process. Duso et al. discloses that, when a slave controller discovers an error in the master controller that requires it to become the master controller, it first assumes the context of the master controller and then sets it's M/S flag to assume the master status and clears the M/S flag in the failed master controller. This ensures that write access by the master controller server will cease within a certain time after the slave controller becomes the master (col. 50, l. 55-67 & col. 51, l. 1-30). The examiner interprets changing the master to slave status, such that the failed device ceases to have write access as instructing a reproducing device to stop. It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the backup unit in the combination of Morley et al., Takamori, and Brown et al. to include stopping write access of the failed device, such as that taught by Duso et al. in order to synchronize the devices and ensure that the failed device ceases to operate (Duso et al. col. 51, l. 23-29).

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL VAN HANDEL whose telephone number is (571)272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
Supervisory Patent Examiner, Art Unit 2623

MVH